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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,496	03/30/2004	Mark McAuliffe	279.737US1	4924

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EXAMINER	
BOCKELMAN, MARK	

ART UNIT	PAPER NUMBER
3766	

DATE MAILED: 10/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/813,496	MCAULIFFE ET AL.	
	Examiner	Art Unit	
	Mark W. Bockelman	3766	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 July 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6,8-24 and 27-39* is/are pending in the application.

4a) Of the above claim(s) *9* is/are withdrawn from consideration.

5)☒ Claim(s) *10-22 and 35-37* is/are allowed.

6)☒ Claim(s) *1-6,8,23,24,27-34,38 and 39* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *11-7-2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Claim 9 is withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 7-17-2006.

Claim Rejections - 35 USC § 112

Claim 39 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The examiner considers the abbreviation "EDM" to be indefinite and requests the entire term of art to be stated.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 8, 23-24, 27, 29-34, 38 are rejected under 35 U.S.C. 102(b) as being anticipated by Iwaskiewicz et al USPN 4,590,950.

In regard to claim 1, Iwaszkiewicz discloses, "...the insulating means is outer insulator 14 which surrounds first conductor 19..." (Column 3, lines 33-35; also see figure 2). In regard to the inner electrode, Iwaszkiewicz discloses, "...a conductive

bridge is provided, one end of which is in electrical contact with said first conductor and the other end of which projects through an aperture in said insulating means...the conductive bridge may comprise a wire 20..." (Column 3, lines 38-43; also see figure 2). In regard to the outer electrode, Iwaszkiewicz discloses, "According to the invention, a second tubular conductor is provided engaged around a pre-determined length of said insulating means. As embodied herein, the second tubular conductor is ring electrode 11" (Column 3, lines 63-66; Also see figure 2). Iwaszkiewicz further discloses, "By inserting bridging conductor 20 through opening 14a, 14b in outer insulation 14, one end of bridging conductor 20 is thus in electrical contact with first conductor 19" (Column 4, lines 8-11; See also figure 2). From figure 2, it can be seen that there is a void between a portion of inner electrode 20 and outer electrode 11. Furthermore, figure 2 shows that there is insulative material 14 extending between the outer electrode inner surface to at least a portion of the inner electrode outer surface. In regard to claims 2 and 3, see figure 2. By observing figure 2, the examiner views the upper portion of element 20, just left of the upward bend, towards element 11 to be the coupling projection. This is in further view of Iwaszkiewicz's disclosure that "By inserting bridging conductor 20 through opening 14a, 14b in outer insulation 14, one end of bridging conductor 20 is thus in electrical contact with first conductor 19" (Column 4, lines 8-11; See also figure 2). In regard to claims 4 and 21, Figure 2 shows the projection formed from element 20. This element has a top surface that contains two edges; one terminates, and the other is connected to the rest of the "electrode" (the bridging wires, 20). These edges act as an alignment means, since they aid in determining the

placement of the ring electrode 11. Iwaszkiewicz discloses, "As shown in FIG. 5c, ring 11 is then slipped carefully over bridging wires 20, bending them down into surface of outer insulator 14, and the ring is ultimately moved into a position whereby the ends of the bridging wires are fully confined within the ring. Finally, outer insulator 14 is relaxed to provide a compression fit between the electrode ring 11 and the first conductor 19" (Column 5, line 67 - Column 6, line 8). In regard to claim 5 , see figure 2. From figure 2, it can be seen that the outer electrode has two terminal edges, which can be used to align the electrode over the bridging wires (20). Therefore, the outer electrode inherently contains alignment features to aid in the positioning of the electrode. In regard to claims 6 and 24, Iwaszkiewicz discloses, "As shown in FIG 5c, ring 11 is then slipped carefully over bridging wires 20, bending them down into the surface of outer insulator 14, and the ring is ultimately moved into a position whereby the ends of the bridging wires are fully confined within the ring" (Column 5, line 66 - Column 6, line 3). Since the ring electrode contains a hole through which the lead is passed in order to aid in the positioning of the electrode, the electrode contains a slight hole, which is used as an alignment feature. In regard to claim 8, Iwaszkiewicz discloses, "As embodied herein, the conductive bridge may comprise a wire 20 of circular cross-sectional dimension, but it may also be of other forms, such as thin foil" (Column 3, lines 43-44). The examiner views "thin foil" to mean that it could include a flat wire, similar to that of thin foil and would therefore have a cross-section with one or more substantially flat sides. Furthermore, Iwaszkiewicz discloses, "As embodied herein, the conductive bridge may comprise a wire 20 of circular cross-sectional dimension, but it may also be of other

3, lines 43-44). In a wire of circular cross-section, the diameter remains constant throughout the length of the wire. Therefore, when the base of the wire is defined as the first end and the top of the wire is defined as the second end, the height of the wire can be considered to be "extending substantially". Since the projection, as defined in claim 2, is made of the same wire as the inner electrode (element 20), the projection can be seen to be "extending substantially" from the first end to the second end. The inner electrode (element 20) is also extending substantially from the first end to the second end. In regard to claim 27, see rejections for claims 1 and 2. In regard to claim 23, see previous rejections for claim 16. Furthermore, Iwaszkiewicz discloses, "Preferably, ring electrode 11 is positioned so that opening 14a, 14b is centrally longitudinally disposed relative thereto" (Column 4, lines 19-20). Therefore, the openings 14a and 14b are used as alignment means for aligning the outer and inner electrodes. In regard to claims 29-32, Iwaszkiewicz discloses, "Referring to FIG. 3, this subassembly is made by piercing a small hole in the insulator 14...Wire 20 is then slid into position and cut to length as shown" (Column 4, lines 62-69). As previously mentioned, wire 20 is the inner electrode. Iwaszkiewicz further discloses, "As shown in FIG. 5a, a tapered section 14c is next created on the outer insulator 14 portion not supported by the first conductor 19. This taper facilitates positioning electrode ring 11..." (Column 5, lines 49-52). Iwaszkiewicz further discloses, "This outer diameter reduction enables the electrode ring 11... to be advanced without much restraint towards ends of bridging wires 20 protruding from the outer insulator 14. As shown in FIG. 5c, ring 11 is then slipped carefully over bridging wires 20, bending them down into surface of outer insulator 14, and the ring is ultimately

moved into a position whereby the ends of the bridging wires are fully confined within the ring. Finally, outer insulator 14 is relaxed to provide a compression fit between the electrode ring 11 and the first conductor 19. The bridging wires are thus clamped in place between thr insulator 14 and the conductor 19 and in electrical contact with the latter" (Column 5, line 62 -Column 6, line 8). In regard to claim 30, after a hole has been punched into the insulative member 14, it is considered by the examiner to be a preformed insulative member with recesses. In regard to claim 32, see also figure 4. In regard to claims 33 and 34, see rejections for claims 4 and 27, along with figure 2.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Iwaszkiewicz et al (US 4,590,950) in view of Wessman et al. (US 6,952,616).

In regard to claim 28, Iwaskiewicz discloses a method for coupling an inner electrode with an outer electrode and having an insulative member disposed therebetween, along with a means for coupling the outer electrode to the inner electrode. However, Iwaszkiewicz fails to disclose the method of coupling the outer electrode to the inner electrode to be welding. Wessman, on the other hand, discloses a method of welding the inner electrode to the outer electrode. Wessman discloses, "FIG

2. illustrates the details of an embodiment of the connection between a conductor 22 and a band electrode 14 in accordance with the present invention" (Column 4, lines 47-49). Wessman further discloses, "Band electrode 14 is connected to lead body 1 at welding regions 20 by a weld through band electrode 14 to electrically connect the band to conductive pad 24" (Column 4, lines 55-58). Wessman goes on to disclose, "A weld 26 is typically used to secure the conductive pad 24 in electrical contact with conductor 22" (Column 5, lines 25-26). Referring to figure 2, it can be seen that Wessman uses welding to connect the inner electrode to the outer electrode. Therefore, it would have been obvious to one of ordinary skill in the art to modify the device of Iwaszkiewicz in view of the teachings of Wessman in order to create a lead wherein the connections between the two electrodes is stronger than those in the lead of Iwaszkiewicz.

Allowable Subject Matter

Claims 10-22, 35-37 are allowed.

Response to Arguments

Applicant's arguments filed 7-17-2006 have been fully considered but they are not persuasive. In regard to claim 1 and 27, the inner electrode it electrically coupled to the conductor through out it's entire circumference. In regard to claim 23, the examiner considers the means for aligning as stated in the rejection. Applicant argues more narrowly then the claim permits.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark W. Bockelman whose telephone number is (571) 272-4941. The examiner can normally be reached on Monday - Friday 10:00 to 6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pezzuto can be reached on (571) 272 -6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MWB

September 30, 2006

MARK BOCKELMAN
PRIMARY EXAMINER